



# **FAMILY LIFE EDUCATION FOR ADOLESCENTS**

---

**STATE AIDS CELL, THIRUVANANTHAPURAM**



***Community Health Cell***

Library and Documentation Unit

367, "Srinivasa Nilaya"

Jakkasandra 1st Main,

1st Block, Koramangala,

BANGALORE-560 034.

Phone : 5531518

## **PREFACE**

The Indian society is passing through a phase of rapid transformation. The assault of the media, both printed and through the air, has created new value systems and attitudes, often alien and unsuited for our culture.

Nowhere is this more evident than in the field of lifestyles. The traditional value systems governing human relations at the societal, family and interpersonal levels have given way to a new set of norms. Promiscuity is propagated and indeed praised as a necessary virtue. Marital infidelity and increasing promotion of sex trade pose real dangers to the fabric of the Indian society. The alarming increase of HIV and AIDS in our society is a clear warning about the future shock.

Adolescence is the age when impressions are formed and future behaviour moulded. Lack of proper knowledge and attitudes on matters pertaining to sex and reproduction constitutes the single most important impediment to our efforts to shape a healthy society for the twenty-first century. Our school curriculum has totally ignored the need for proper health education containing elements of sex education. Teachers are either shy or often ignorant on all aspects of sex and reproduction, which prevent them from giving proper guidance to the children.

This handbook, prepared after considerable thought and deliberations, is an attempt to fill the void. We hope that the teaching community in Kerala would find the publication useful.

**Thiruvananthapuram  
31-8-995**

**Dr.S.Madhavan Nayar  
State AIDS Programme Officer**

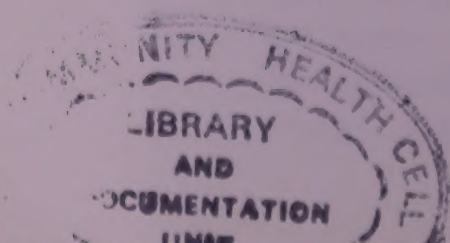


## ROLE OF TEACHERS - GOING A STEP AHEAD

### Why Teachers . ?

All of us have fond memories of our adolescence. Still at least some among us were not very fortunate to have had a smooth go at it and always wished "if only I had some guide and philosopher to get me through my difficult years". Traditionally, in the joint family system we imbibed a lot of understanding and skill without even realizing that we were receiving family life education. The societal norms were such that mostly we tried to limit our activities within the acceptable norms of the society. Our parents and teachers tried to instil in us the correct moral values as thought appropriate for the time. Times have changed. Very little societal control is perceived now and whatever is still left is not appreciated. Present-day parents themselves often feel inadequate to cope with the fast changing norms of society and hence are not sure how to guide the youngster. Teachers, our traditional source of wisdom, are often confused about their role in society at least vis a vis the problems of adolescence. Yet they have the best opportunity to guide the destiny of millions of youngsters, if only we could empower them their legitimate role in society.

Dr.C.R.SOMAN  
HEALTH ACTION BY PEOPLE  
THIRUVANANTHAPURAM



WH-150  
06961

1795



## 1. INTRODUCTION

### Why adolescence ?.

Adolescence is that period in our life where nothing seems to go smoothly, yet our best memories are about those wonderful days. The present-day adolescent is considered to be more knowledgeable about world affairs, thanks to the onslaught of the media, so much so, many question the need for any special programme for adolescents. On the other hand some feel disillusioned about the way things are going and hence point out the futility of any intervention programme at this level.

Many among us working in the field of HIV/AIDS are convinced that today's youngsters have totally lost the traditional moral values that we talk about and it is high time that we accept the ground reality and go all out to prevent HIV infection among this vulnerable group. But still the society does not accept this view and hence is unlikely to cooperate with any drastic programme. No parent is likely to accept the view that their own little one is at high risk of HIV infection, even if hard data is to the contrary. Yet everybody is convinced about the need to do something before things go out of hand, particularly looking at the experience of many other countries.

For the parents of Kerala at least what comes to their heart is academic performance of their children. Studies done at the Child Development Centre, Thiruvananthapuram have conclusively proved that birth-weight is the single most important factor that determines the mental development of the young child and that a baby with normal birth-weight has a sure edge over the low birthweight baby at least to start with. Now it is also very clear that the most important community factor that predicts low birthweight is the poor nutritional status of the mother reflected as a pre-pregnancy weight of less than 40 kg and height of less than 140 cm. Hence the Action Plan for the Child, Kerala, has stipulated that all girls in Kerala on completion of 18 years should aim to have 45 kg weight and 145 cm height. Hence nutritional monitoring should form part and parcel of any adolescent programme.

Adolescence is also that period in our lives where contradictions are the rule and not the exception. A period when they demand independence, yet are mostly dependent, a period when maximum hostility is shown to the parents, but they want to be loved and cared for by them, a period with maximum rebellion shown, yet want to be the pet baby of their mothers, a period when they reject advice outright, yet love to be guided through difficulties. Surely any conventional approach is likely to fail with this group. Then what do we do ? Reminds me of a story. An ardent devotee of God complained to him that, God, You told me that you would walk beside me always, then why is that whenever I am in trouble I see only one pair of foot prints ?, why is that You leave my side when I need You most?. God smiled and said, son, when you were in trouble I was carrying you on my shoulders. There is thus always a way of guiding adolescents without hurting their huge ego.



## 2. PHYSICAL DEVELOPMENT DURING ADOLESCENCE

The period of adolescence roughly spans the age of 12 to 18 years. This is a fascinating period of life because it marks the transition from being a dependent child to becoming an independently functioning adult.

Adolescence (also known as puberty) is a time of considerable change in virtually all aspects of human growth and development. These changes can be divided as follows.

- 1) Change in physical stature
- 2) Emotional changes
- 3) Changes in thinking and behaviour

### Factors responsible for the changes of Puberty

There is a gland in the brain - the Pituitary gland. Just before puberty there is a rapid increase in the hormones secreted by this gland and there is an increased sensitivity of the ovary and testes to these hormones. This is responsible for initiating the changes of puberty.

During this period the ovary and testes increase in size and become functionally mature and secondary sex characters like the breast, hair in the arm pit and external genital organs develop.

### Physical Changes

There is rapid increase in height and weight and also growth in most of the body systems as a result of the various hormones produced during this period, and the body changes from that of a child to that of an adult.

Girls start growing tall earlier than boys but boys catch up within a few years. So if one is a boy and shorter than the girls in the class, there is no need for worry, he will be taller than most of the girls by the time he is in college.

Boys will become more muscular and grow facial hair and moustache begins to appear. One may also find hair growing in one's armpits, chest and also around one's sex organs. The voice will also change one day from the high pitched voice of a child to the deeper voice of an adult. The penis gets erect often especially in the mornings when one wakes up and also on other occasions when one is excited. These are normal events. During this time 'wet dreams' or nocturnal emissions occur in boys and this is normal and need not cause any alarm or concern. The testes which has increased in size now starts producing sperms which means that the boy is now, capable of fathering a child.



Bodily changes in girls include enlargement of breasts and the areola and the nipples, widening of the hips and growth of hair in the armpits and around external genital organs. However the most striking change the girls undergo will be the beginning of menstruation - 3 to 5 days of bleeding from the uterus once a month - that will continue until the late forties or early fifties. For the first one year the period may not be regular. The onset of menarche only means that the person is physically capable of becoming a mother.

The appearance of pimples is due to the effect of sex hormones increasing the size and secretion of the oil producing glands in the face. This occurs in both boys and girls and is quite normal, although often disturbing.

### **The male reproductive system**

The testes are made up of many loops along the walls of which the sperms are formed. The two ends drain into ducts in the head of the epididymis. From these, the sperms pass through the tail of the epididymis and into the vas deferens. They enter through the ejaculatory ducts into the urethra at the time of ejaculation. The penis has two parts. They are the glans and the part surrounding the urethra. The glans is the slightly enlarged part of the penis and is covered with skin at birth.

The fluid that is ejaculated at the time of orgasm, the semen, contains sperms and secretions of the seminal vesicles, prostate, Cowper's glands and probably the urethral glands. There are normally about 100 million sperms per millilitre of semen.

Nocturnal emissions are an expression of the development of the testicles and other male organs of reproduction. This occurrence is normal and should be no cause for worry. It may occur as early as the 9th or 10th year or as late as the 16th or 17th year.

### **The female reproductive system**

The female reproductive system consists of a pair of ovaries that produce eggs or ova, a pair of fallopian tubes, the uterus, the vagina and external genital organs. Hymen is that thin centrally perforated membrane that separates the external genitalia and the vaginal canal and is usually intact in a virgin unless otherwise destroyed by excessive physical activities.

The reproductive system of the female shows regular cyclic changes. This is the menstrual cycle and its most conspicuous feature is the periodic vaginal bleeding that occurs with the shedding of the uterine lining.

Sexual development begins early in adolescence when pituitary hormones stimulate the two types of cells within ovaries and secrete hormones. Secondary female characteristics appear during this time and menstruation starts. These hormones are also responsible for the growth spurt.



## The menstrual cycle.

The length of the cycle varies in women but on average it is 28 days from the start of one menstrual period to the next. About the 14th day of the cycle, a mature ovum is released by the ovary. This is known as ovulation. The ovum is picked up by the fimbriated ends of the fallopian tube from where it is transported to the uterus. If fertilization does not occur, it is expelled through the vagina. If the ovum joins with a sperm, conception takes place.

One egg/ovum is released alternately from each of the two ovaries. During a woman's childbearing years (in the course of a normal reproductive life) about 500 ova are stimulated to mature. But most of these ova are not fertilized.

After the release of the ovum, certain hormones are secreted. These stimulate the uterus, causing the wall of the uterus to become thick and increase its blood supply. If conception takes place the matured ovum gets embedded in the uterus. When conception does not take place, the egg or ovum, along with the thickened lining of the uterus and blood, is shed through the vagina. This is menstruation.

Normally, bleeding occurs for three to five days. Some girls experience severe pain before or during menstruation. If the pain is severe, there is no need to suffer quietly, Medicines can help. Good nutrition and Iron-Folate tablets are also necessary to compensate for the blood loss.

## Personal Hygiene

Great care should be taken in personal hygiene during the period of adolescence. Keep the genital organs clean and dry. Good dental hygiene, bathing twice a day, washing hands before eating and after going to toilet, etc., are good habits to follow. Among boys attention should be given to wash away 'smegma' - thick secretions collected under the foreskin of the penis - while bathing and after urination, whenever possible.

Among girls it is important to remember that the female urethra tube through which urine is passed - is situated close to the vaginal opening and the anus and hence care should be taken to wash these parts after passing urine. Care should also be taken to wash from front to back after passing motion to prevent urinary infection. Not taking adequate water during hot summer days and not passing urine in the school (may be because toilets are not clean), are the most important reasons for getting urinary infection.

Only clean clothes, pads, or sanitary napkins should be used during periods. They should be changed frequently and the area should be kept clean and dry as much as possible.

It is not necessary or advisable to remove the hair around the genital organs. It is not uncommon to have some discharge coming from there, especially before menstruation. There may also be some itching around the genital opening or in the groins especially after menstruation. One need not feel embarrassed about this. If



the discharge is smelly or staining clothes, a doctor who is well acquainted with the girl, even as a child, and in whom the girl has confidence, may be consulted.

## Conception

When a sperm enters the female reproductive tract, it swims upward through the vagina and uterus towards the fallopian tubes.

Every month, a woman's ovaries release one egg into the fallopian tubes. The one or two days before the egg is discharged is her fertile period and conception can take place only at this time.

Millions of sperms are released during ejaculation; however, only a single sperm may fertilize the egg. Several hundred of them may reach the fallopian tube; they then burrow through the thick protective layers that surround the egg and the first sperm cell to pass through these layers fertilizes the egg.

The fertilized egg travels down the fallopian tube and implants itself in the wall of the uterus. Hormonal changes occur in the body and these can be detected in the urine through a pregnancy test. Such a test will show a positive result four to six weeks after conception.

## Contraception.

There are several methods of prevention of fertilization of egg.

1. Abstinence (complete avoidance of sex)
2. Rhythm method (avoiding sex during a woman's fertile period, usually between the 10th and 18th day after the onset of menses)
3. Withdrawal (prevention of sperm entering the vagina)
4. Condom (prevention of sperm entering the vagina; this barrier method also prevents transmission of STDs and HIV).
5. Birth control pills (regulating a woman's hormonal cycle to prevent release of egg).
6. Diaphragm or cervical cap (preventing sperm from entering the uterus).
7. IUD (Intra-uterine device or coil, to discourage the fertilized egg being implanted in the uterine wall).
8. Depot injection (a long-acting hormone injection, resorted to only if other methods cannot be used).

All methods of contraception are the shared responsibility and decision of both partners. It is preferable to postpone pregnancy until the couple feels physically, emotionally and financially capable of caring for a baby.



All contraceptive methods are user-dependent. If a method is not strictly adhered to, pregnancy may occur.

Only (i) abstinence, (ii) Sex with a single faithful, uninfected partner and (iii) condom-use, provide protection against transmission of HIV or other infections. To be effective, condoms should be of good quality and lubricated; they should be used properly and regularly.



### 3. EMOTIONAL DEVELOPMENT.

#### Emotional changes in adolescence.

Even though the body rapidly changes and grows into the adult form, emotional development takes longer to become stable. This means that though the body is capable of performing adult roles, the emotions may not be completely free from the patterns and reactions seen during early years. The people around and sometimes even the parents may not realize this. So when the adolescent is worried about the various changes he/she is facing, the elders may interpret this worry as "moodiness".

On the other hand, the adolescent may expect to be treated like a grown-up and even want to do things like grown-ups without realizing that it would probably be wiser to wait until he/she is an adult, so that the responsibilities and consequences of actions are understood better. During this time one may easily get upset when one is not treated like an adult and also rebel against anyone who questions one's right to do so.

An adolescent expects to behave confidently like an adult, but loses confidence in oneself while trying to do so. There is no reason for worry! As one grows older one will be emotionally more confident.

Another important aspect of the emotional change faced by the adolescent is the realisation that the opposite sex is no longer irritating but attractive. Curiosity about sexual matters is a common part of growing up and an essential part of preparing for adulthood. Sexual fantasies about people of the opposite sex are a common part of growing up and are not abnormal. Friendship between a boy and a girl can be like the friendship between a boy and a boy or a girl and a girl. This is a time to treat the members of the opposite sex with respect and dignity.

Sexual curiosity and fantasies as well as hormonal changes may arouse strong sexual feelings. One may attempt to satisfy these feelings by masturbation - stimulation of the genital organs to achieve sexual satisfaction. But it is not abnormal and need not arouse a sense of guilt or shame. However, it should not be encouraged. Yet if it bothers one all the time, one may need the help of a Psychologist or Pediatrician.

#### Self-esteem:

The importance of self-esteem in personality development is well established. Self-esteem or self-concept is an integral part of personality which an adolescent should develop in handling peer pressure and decision making.

Some factors that directly enhance self-esteem are positive thinking, self-confidence and ability to cope with failure.



Individuals who have high self-esteem are more realistic in their approval of self and others. They are less wounded by criticism and more able to profit by it; less anxious for approval, more ready to participate, more inclined to aim high, more consistently successful and less daunted by failures than those whose self-esteem is low.

Self-esteem is a personality trait, a learnt response which, with re-education and re-enforcement, can be positively modified. A teacher who offers every child success at his or her own level, and also has the gift of making every child a valued, significant and respected member of the class, can easily raise the self-esteem of the child. Every person has an innate psychological need to succeed, and this success cannot always be in academics alone. Hence the teacher should make a positive attempt to encourage the child to achieve success in areas where he/she has strength. If not, the child may show undesirable habits to catch the attention of others.

### **Positive thinking**

A person's thinking process is influenced by his ability to analyze, introspect, evaluate any phenomenon in a particular way. Adolescents are to be guided to become aware of the thought processes taking place within them. This is possible by consciously developing positive thinking. Every student can be trained to start thinking positively in classroom and real life situations. Positive thinking is a process that provides an approach to getting the best out of a given situation; it strengthens the personality in general and self-esteem in particular.

### **Saying 'NO' to unhealthy peer pressure:**

The theory underlying the self-empowerment approach is based on liberal principles of education where individuals are free to make their decisions and be accountable for them. Some young people cope well with teen-age years while some others find it stressful. Sources of stress are: identity crisis, the need to belong, lack of appreciation from parents or teachers, instant gratification-seeking behaviour, need to find audience for non-conformist or non-traditional attitudes and, most important of all, to be popular or well liked. Then there are those who live off 'kicks'. These desires are reinforced and transmitted by mass media, teen-age magazines, fashion aspects of mass media and cinema. To be able to belong to a peer group, new experimentation may often be a part of some person's 'initiation' into the group. So they give in to unhealthy peer pressure.

It is very common for youngsters to have a role model. The model's ability to deal with adverse situations and their value system will directly influence adolescents. Parents and teachers are usually the role models for young students.

The ability to cope with failures, to plan leisure time activities, to communicate well with peers, parents and teachers, and assertive behaviour, will help students to deal with unhealthy peer pressure.



The teacher should get the students to think about life situations. Students should be able to define peer pressure, identify the pressure, both positive and negative. The goal is to teach the students to be 'assertive' as a way to say 'NO'. The verb 'assert' means to state positively, assuredly, plainly, strongly, smoothly and convincingly. Being assertive does not mean being aggressive.

If one is assertive one can:

1. Stand up for one's own values and needs.
2. Take control of one's own decisions.
3. Trust and value one's own feelings.
4. Recognize and use non-verbal communication.
5. Recognize the attempts of others to control.
6. Be proud and take pleasure in saying 'no' when one wants to say 'no'.

### **Changes in behaviour thinking.**

Studies require new ways of thinking. For example one will not be able to memorise everything as one did in one's lower classes. Hence one will start using abstract reasoning and develop problem solving skills. So this becomes the age for intellectual pursuits. The understanding of events in one's environment improves and the ability to arrive at one's own conclusion to various situations develops. During adolescence one finds that friends are very important and what they think of one is more important than what the parents think of him/her. This is only normal and helps one to become independent. But this has its dangers too-one may want to be like one's friends and they may urge him to do things which one really should not be doing like smoking, beginning to drink, neglecting studies, stealing, gambling, experimenting with sex/drugs/alcohol, etc. Please remember that one always has the right to say, "No" to any of these pressures. When one has a problem with any of these, it is best to discuss it with a trusted elder in the family or a friendly teacher, or one's trusted doctor.

One does not become an adult by doing things which even adults should not be doing. Adulthood is a period of life and not just a way of doing things. When one's turn comes up, the choice one makes will be one's own and not somebody else's.

### **Decision making and critical thinking:**

Young adolescents must be given opportunities to practise making decisions. They need to become self-directed individuals with a capacity for critical thinking. If decisions are made by adults who severely regulate a child, the child is going to let others control his or her life. As a result the child will not make any attempt to make



decisions. Adolescents have to make choices: some are harmless and inconsequential; some have longlasting and harmful effects. If there are negative outcomes due to some decisions that were not well thought out, they will eventually result in an adolescent who is frustrated and unhappy.

The young teenager who is experiencing a period of rapid and intense physical, psychological and emotional changes is very vulnerable to all stimuli in the environment, easily influenced by a wide variety of messages and information. Students need to look closely into the messages or stimuli, be critical about those that have a direct impact on their daily life, especially those that affect their physical and emotional well-being (eg. use or abuse of drugs/alcohol).

### **Critical thinking**

The ability to make correct decisions may not be a natural process of growing up. Adolescents should be guided to think and analyze critically about a variety of issues. They should be able to form opinions based on a certain value system. Their sense of 'right' and 'wrong' will help them to make decisions. Critical thinking forces an individual to examine the facts and the information available carefully before acting, thus helping him to make wise decisions.

### **Attitude towards problems:**

A tumbler which contains water amounting to half its capacity can be seen in two different ways.

1. The tumbler is half empty.
2. The tumbler is half full of water.

The former is a pessimistic view and the latter is a sign of positive thinking. Parents and teachers are in a position to modify children's ways of viewing things such as life, challenge, competition and setbacks, by making them realize their own strength and capabilities.

The whole process of positive thinking is to lead the person to face, play and realize life. Today's life has more competition and less co-operation. In every field persons are pitted against one another and excellence is widely proved on the basis of survival of the fittest, rather than on competencies. This is a negative development and students should not fall prey to or become victims of the competitive world.

### **How do we develop positive thinking ?**

A person starts feeling confident when he/she is encouraged at the right moment in the right direction. Every person performs a right action or takes a right decision at some time or other. The positive strokes from parents, teachers and elders at this moment, are instrumental in developing self-confidence in the person.



There are certain beliefs that lead to development of positive thinking:

1. Believe that every situation is a new one. Lessons from past experiences should be taken; but do not equate the present situation with past experience.
2. Fear of consequences destabilizes confidence in taking decisions and evaluating the situation.
3. View all problems and situations as a thrilling game, to be played carefully and committedly. Negative outcome does not mean that you are worthless.
4. Don't take a decision or take up any issue when you are at a heightened level of emotions like anger, sorrow etc. Allow some time to pass, and feel that the emotions were never yours.
5. There is no one in the world who is free from problems and hardships. We usually think that our problems are great.
6. Believe that every problem has a solution, just as every lock has a key.
7. Live up to your principles. A task may die but let not principles die.
8. You can change or modify your behaviour. Don't blame your nature which is nothing but repeated practice.

### **Coping with failure:**

The decisions we take and the activities we do are aimed at reaching an objective. There are occasions when things do not turn out as we thought. The impact the failure made on us is sometimes more disastrous than the failure itself. So we need to clarify and approach the problem carefully, so as not to become victims of our own thoughts.

The feeling of failure is a subjective reaction to the unexpected, unfavourable outcome. Perception of failure cannot be generalized since the mental make-up, attachment towards the task or importance attached to the outcome vary from person to person, from situation to situation, and from time to time. The same person may perceive an outcome as failure at one time and not so at some other time.

Coping means tackling the state of one's mental or physical disequilibrium by adopting the next best possible alternative.

The innate drive of every person to reach a balanced state of mind is nature's gift to help us out of an unwanted situation. Every person's growth has a history of coping behind it. At the student's level, with less experience and with more expectations in academics, sports and special activities, they are likely to face setbacks and failures. These failures should not impair their development. As a preparatory platform to face the challenges of life, the young will have to be properly trained to cope with unexpected outcome.



Our task of carrying the message of "FAILURE CANNOT CONTINUE TO BE FAILURE IF WE CONTINUE TO GROW" gains importance. Alternatives have to be put forward before young people or they have to be helped to identify the alternatives. Students who feel a sense of control and responsibility in life remain self-confident even where there are occasional failures. Success or failure are not as important for students as are self-confidence, the feeling of responsibility and self-control.

Inability to cope with failure may result in low self-esteem, dejection and, ultimately, in depleting one's sense of competence. This is the psycho-social process which a person undergoes.

Many live in the past or worry about the future and do not realize the worth of the present. Any present condition/outcome is undoubtedly a product of the past, but the present is a seed of the future. By motivating students to live in the present and training them to fuse the means and ends of the task, we can achieve much towards fulfilling our task.

### **Leisure time activities:**

Students who are gainfully utilising their leisure time are less influenced by unhealthy lifestyles. Gainful leisure-time activities include sports, reading, music, hobbies, helping others, appreciation of nature, spending time with family, etc.

Every student should be encouraged to develop a hobby or an activity, either in school or at home, which will kindle his/her thinking and creativity. The idea is not to have any time to be aimless and idle. An adolescent who is not able to plan his leisure time often joins a group of peers who are also aimless. These are the young people who are prone to high risk activities. Often, to justify these activities, they become defiant and don't want to hear any advice or suggestions.

Parents have a responsibility to introduce their children to various activities and help develop them. They should have some special family time when the children feel free to discuss anything.

Schools should encourage participation in activities like Health Clubs, National Service Scheme, Red Cross Society, Scouts and Guides and other clubs to develop meaningful leisure time activities. Teachers can definitely take the lead in these activities, which may not bring any monetary benefit at all, but surely will give them lot of psychological satisfaction of accomplishment.

### **Adolescent Counselling**

Recently one adolescent girl told me "the whole day my mother keeps telling me, don't do this, don't do that, but she never once told me what I should do with my time". This, in essence, summarises the problem of adolescence, with a mind wanting to explore new feelings, dream about anything and everything and a



down-to-earth but most unimaginative parents worried about the immediate examinations on hand, admission to a Professional College and so on .

Before we even dream of counselling an adolescent, we must be very sure that we understand the adolescent psyche very well. They are different and rightly so.

Then what are the striking characteristics of this age ?

- 1) **Ego:** Wanting to be totally independent and imitating adult behaviour, but on the other side, extremely insecure without reassurance and support given, not obviously but subtly.
- 2) **Anxiety:** Lots of anxiety regarding normal variations of growth, secondary sexual characteristics and also about future, in fact more anxiety about distant future-concerns rather than immediate targets.
- 3) **Idealistic or Moralistic:** Terribly idealistic can think of only black or white, no shades in between, meaning not able to adjust to realities of society.
- 4) **Dependence on friends:** Extremely strong bonds. Love to spend time with friends, listen to them, believe them and expect parents to love their friends as they love them.
- 5) **Hostility to parents:** Showing unnecessary hostility to parents or any disciplinary authority - becomes aggressive, hurt and withdrawn, listens to reasoning rather than instructions.
- 6) **Mood change:** Sudden fluctuations of mood, delighted one moment, depressed next moment, can't handle emotions well, hence overt hostility.
- 7) **Can't accept rejection:** Need to be loved, accepted and pampered a lot, demands attention, can't accept failure. Since everybody can't be number one in studies, parents need to encourage situations where they can be a success, whether it is sports, music, art or literature.
- 8) **Interest in opposite sex:** In fact lack of it needs to be considered abnormal.
- 9) **Fads:** Food, clothing and lifestyle imitation is, to a great extent, normal unless interfering with studies.
- 10) **Mob Reaction:** Behaviour totally different and most unlike himself or herself when in a crowd or among friends.

### **Role of Teacher Counsellor.**

Counselling is more of an art than science. If it is a science it is the science of common sense. Every counsellor must have the capacity to:

- 1) Go back into one's own childhood and to place the adolescent child in one's shoes.



- 2) Think with an open mind, without hang-ups, rigid ideas and sense of righteousness.
- 3) Avoid being a preacher, be a friend and guide, very understanding of the child and his/her problems.

### Issues bothering the adolescents

BOYS	GIRLS
1. Acne	1. Acne
2. Short or tall	2. Beauty
3. Lack of facial hair	3. Hair on arms, legs
4. Breast enlargement	4. Breast size, shape
5. Nocturnal emissions	5. Vaginal discharge
6. Masturbation	6. Masturbation
7. Size of penis	7. Love, Marriage, Child
8. Homosexuality	8. Lesbianism
9. Pornography	9. Sexual abuse
10. Peer violence	10. Problem of privacy

The teacher counsellor has to be sympathetic to the problems of the adolescents and never treat them as silly and then only he or she can be a success.



## 4. LOVE AND FAMILY RELATIONSHIP.

Every human being has a need for love, and love needs to be expressed. Sex may be considered as a human expression of creative love.

A child blossoms forth through adolescence with the help of warmth, security and love of the family. During this adolescent period, there will be a total change of attitudes. His/her personality will experience some physical and emotional changes. Love and attraction for the other sex and the sexual urge generally commence at this stage.

Love brings people together. The world cannot exist without love.

### Loving someone means:

Caring for that person and being cared for;  
 Wanting to be intimate and close to that person;  
 Wanting to communicate with that person, share all thoughts,  
 secrets, fun, sorrows and future plans;  
 Just enjoying being together.

### Love can be between :

Father and child; mother and child; siblings; friends; a man and a woman. Love can also be expressed through a hug, a kiss, an arm around the shoulder, a smile or just a meaningful eye contact.

A relationship develops through a sense of belonging, affection, understanding, friendship and years later we should be able to remember it with happiness. In any relationship, remember that it should never leave behind in you a sense of guilt or hurt. If you love someone you will never want to hurt him or her. You will never want him/her to lose his/her self-respect just for your few moments of pleasure.

Thus relationship between a man and a woman is qualified by a life-long commitment, sanctified by a marriage. Faithfulness, good understanding, give-and-take are all characteristics of such a healthy relationship.

The two together take the journey, agreeing to offer as a total self-gift to the partner himself/herself, both body and soul. This also has a private form of love which is intimate, leading to physical closeness with each other and in this loving embrace, the man inserts his penis into the woman's vagina and gives her something of his own: his seed of life. The woman lovingly receives this seed. The fruit of their love can be a little baby born to them nine months later. Thus this relationship can be transformed into another living human being, complementing and fulfilling their love. Today each couple is advised to have just two children to plan their family well.



The tremendous power of sexual energy is to be well channelized. A boy/girl who has a healthy attitude towards his/her sexuality will grow up to be a happy, responsible and loving father/mother, and a healthy individual.

### **Development of life skills:**

By teaching life skills to young adolescents, we are trying to prevent them from experimenting with drugs, alcohol and casual sex. These youngsters have to deal with the pressure of having their beliefs and value systems constantly challenged, even while they are trying to achieve their goals in spite of adverse situations.

### **The value system:**

Values can be considered as roots, giving meaning to our life and its activity. The changing socio-economic and political scene, exposure to media, varieties of information, and peer pressure demand that adolescents think critically and build up their own value system on the basis of universally accepted principles. This continues through value clarification and growing commitment, until the values become a consistent aspect of the person's behaviour.

### **Family:**

The family stands for certain basic values necessary for living usefully and meaningfully. Only if the sapling is fenced properly will it grow and become a strong tree; so too, with young people.

A person with a wholesome personality is one who has strong mental, physical and cognitive skills which enable him to behave, relate to and act effectively in the society in which he lives. Value-based actions undertaken by such a person are beneficial to society and less influenced by unfavourable conditions. Certain self-evaluatory and self-disciplinary skills can enable students to see the applicability of values and the benefits that come from the value systems that they have developed.

### **Healthy attitude towards sex.**

Sex should be linked with love, affection, tenderness, care and consideration for the feelings of others and respect for one another. This is the normal outcome of warm, affectionate and healthy upbringing. The more sex is associated with fear, guilt and aggression, the less integrated it will be with respect and affection. A concern with family life education must stem from recognition that human socio-sexual development is a learning process. A person's sexual expression depends on socialization and he/she should be encouraged to develop behaviour which is responsible and accountable.



Education aims at initiating people into worthwhile activities concerned with learning and understanding. Sex and family life therefore can only give the facts; these cannot impose a particular attitude towards sexual morality. Sex and family education must aim at imparting knowledge and healthy understanding of sexual behaviour, complemented by love and mutual concern. The influence of peer pressure as a strong motivating factor is a key issue that should be discussed freely with the students.

Sex and family life education are therefore complete only when the youth are capable of making informed decisions. The more informed a person is, the better he/she is able to choose the responsible course of behaviour. The more aware one is of the options, the more freedom one has to conduct oneself. Freedom and responsibility are two sides of the same coin.

Sex and family life education should enable people to be aware of a full range of possible sexual behaviours and values so that they can meaningfully choose their own behaviour. Teaching about the reproductive system alone is not sufficient.

#### **The components of family life education should be as follows:**

1. Foster the attitude that sexual relationship is like any other relationship where the feelings and needs of both partners are equally important.
2. Foster each person's ability to introspect on his/her own sexual feelings and needs. Without such insight one might not know how to avoid hurting oneself or others. Lack of such insight may impair development of close relationships.
3. Develop the ability to be alert and sensitive to difficult situations where one ought to think before one acts.
4. Help students to have confidence in their own judgment and values. On the whole, teachers should have a positive approach to sex and family life education.
5. Subjects such as high risk behaviour, family planning, unplanned children, STDs, etc., should be discussed in the context of HIV/AIDS control.

Dr.M.K.C.NAIR  
DIRECTOR  
CHILD DEVELOPMENT CENTRE  
MEDICAL COLLEGE  
THIRUVANANTHAPURAM

## AIDS (ACQUIRED IMMUNO DEFICIENCY SYNDROME)

AIDS is an acronym for Acquired Immuno Deficiency Syndrome caused by a virus called HIV-Human Immuno Deficiency Virus.

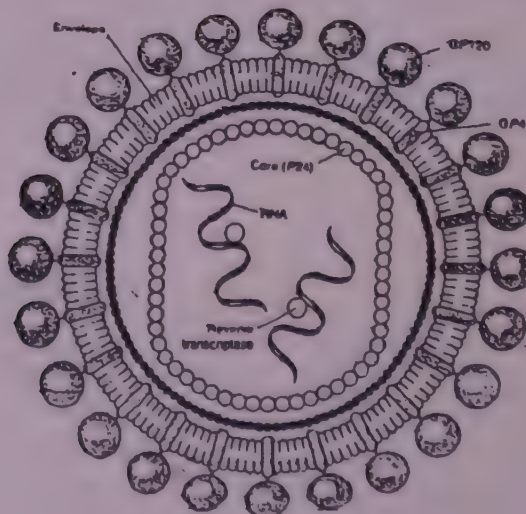
**A** - stands for acquired - because it is always transmitted from someone else

**ID** - stands for Immuno Deficiency - because the virus destroys the immune system of the body  
immune system prevents  
bacteria and other organisms  
from entering in the body

**S** - stands for Syndrome - because the illness exhibits a constellation of signs and symptoms.

### II. What is HIV ?

HIV stands for Human Immuno deficiency Virus. It is an RNA virus belonging to the group of retro virus. It has the size of 1/10,000th of a mm and can be seen only under the electron microscope. This means that a needle-point can include thousands of viruses. It has the shape of a curled up porcupine. It is a highly fragile organism and hence is easily killed outside the human body. Boiling for one minute in water and treatment with 1% bleach solution for 30 minutes will kill the virus. HIV has an outer capsule and an inner core containing an enzyme called reverse transcriptase and two single strands of RNA - the genetic material of the virus.





## HISTORY

- 1981 A small epidemic of pneumocystis carinei pneumonia in Healthy young homosexuals at Los Angeles Hospital
- 1981 Doctors in New York diagnosed Kaposi's sarcoma in several young men
- 1981 Center for Disease Control in Atlanta ,Georgia, named this disease as AIDS
- 1983 Luc Montagnier of France and Robert Gallo of USA discovered the virus
- 1985 ELISA test for HIV was discovered
- 1986 International Committee on Taxonomy of Virus named this virus HIV
- 1986 First case of AIDS in India reported at Pune
- 1986 HIV II was discovered.

HIV destroys the immune system and when the body defences are lost, opportunistic infections invade.

About two crores of people worldwide were infected with HIV in 1994. It is estimated that the number of infected people will rise to 4 crores by 2000 AD. More than 90% of these infected people will be in developing countries like India. Practically all states are affected. HIV spreads rapidly among people with high risk behaviour such as persons who have multiple sex partners and injectable drug users who share unsterilised needles. WHO estimates that there could be 1 - 1.5 million people with HIV infection in India now.

## Where does the virus live in the body ?

HIV thrives and multiplies only in the human body cells. It is present in all body fluids of an infected person such as blood, semen, vaginal secretions etc. Hence those secretions can be a source of infection. HIV can pass through the blood brain barrier and infect brain, cells. Though there is evidence of presence of HIV in saliva, tear, sweat and mothers milk, the concentration of HIV is so low in these secretions that these body fluids cannot be a source of infection.

The important point to remember is that once HIV enters the body of a person, that person become infectious to others in a span of 6 hours and remain infectious throughout his life.

## How does the virus multiply?

After entering the body HIV first attacks T-4 lymphocytes which are responsible for the protection of the human body. The RNA of the virus which is converted into DNA unites with the host cells. In the cell it multiplies and buds out into a new virus

which attacks other cells and destroys them. Slowly the T-4 cell count of the infected person drops to a critical level and the individual develops AIDS.

## **Origin of HIV**

There are several theories regarding the origin of HIV/AIDS but so far there is no scientific explanation for any of them. It is possible that HIV has been around for centuries and may have evolved into a virulent virus by mutation recently.

## **What is the difference between HIV infection and AIDS ?**

An HIV infected person is one who has the HIV in his body. Such a person remains infectious for the rest of his life. However he will appear to be perfectly normal and healthy for many years. When the HIV positive person's immune status breaks down, he develops AIDS. AIDS is only the end stage of HIV infection.

## **How does an HIV positive person progress to AIDS.?**

Weeks after the virus enters the body, some people experience flu like symptoms, fever, headache and body ache. Generally it takes between 2-24 weeks to produce antibodies. During this period the HIV blood test for antibodies will be negative, though the person remains infectious. This period is known as "window period". Hence during the window period, it is not possible to detect whether a person has HIV.

The flu - like symptoms disappear after a while, usually without treatment even. This is followed by a long phase of 5 - 15 years which is asymptomatic and which normally goes undiagnosed. Throughout this period, the immune system starts failing gradually. The common infections attacking HIV victims in India are TB, shingles(Herpes zoster), candidiasis, pneumonia, meningitis, etc. These infections are called opportunistic infections.

## **Symptoms of AIDS**

### Major signs:

- Sudden unexplained weight loss of more than 10%
- Chronic diarrhoea more than one month
- Unexplained prolonged fever of more than one month

### Minor signs :

- Longstanding cough
- Night sweats
- Lymph gland enlargement in more than one site in the body
- candidiasis and skin manifestations



**What is the incubation period of AIDS ?**

It is the time from the start of the HIV infection to the development of symptoms of AIDS. This is usually 5 to 15 years depending on the immune status of the individual. Incubation period is different from window period.

**How do we test for HIV ?**

HIV can be isolated and cultured in laboratories but this procedure is expensive and is done only for academic and research purposes.

There are a number of tests which can detect the HIV. These blood tests are based on detecting specific antibodies produced by the human body. One such is ELISA (Enzyme Linked Immuno Sorbent Assay). This is a screening test usually done in blood banks.

**Western Blot**

This is the most commonly followed confirmatory test. Various other antibody tests are also available in the market.

**Is there any link between AIDS and cancer ?**

Yes. Generally AIDS patients are more prone to develop certain cancers (Kaposi Sarcoma).

**Dr.K.M.K.Nair**  
**THIRUVANANTHAPURAM**

## MODE OF TRANSMISSION

We have already learnt that "THE VIRUS IS PRESENT IN THE BLOOD AND BODY FLUIDS OF AN INFECTED PERSON". Therefore a mixing of one's blood or body fluids with that of an infected person can result in the transmission of the Virus. The body fluids through which HIV may be transmitted are the semen and the Vaginal/cervical fluid. All the other body fluids like tears, sweat, saliva, sputum, gastric juice, or other intestinal juices do not contain enough of the virus to cause an infection. The Cerebrospinal fluid may transmit the virus only to a careless laboratory worker. Traces of the virus present in the breast milk can infect the baby through ulcers/abrasions in its mouth or throat.

There are three main modes of transmission of HIV from one person to another.

1. Through sexual contact
2. Blood transfusion, I.V. Drug use, other invasive procedures
3. Mother to child

The percentage of HIV-infected persons for different routes of transmission are evident from the following table:

Sexual	80 - 90 %
Blood	10 %
Mother to child	0.1 %

### 1. SEXUAL CONTACT WITH AN INFECTED PERSON

This is the common mode of spread all over the world and accounts for 80 to 90 % of all infected cases. HIV can be transmitted by sexual intercourse (Vaginal, Anal and Oral) with an infected person. During such contact, HIV can enter a person's blood stream through the vagina, penis or anus. And transmission can occur from man to woman, woman to man or from man to man. The efficiency of transmission by a single sexual exposure is only 0.1 to 1 %. The risk of infection is greater if either partner has another STD (Sexually Transmitted Disease) like syphilis or herpes, where a sore or lesion is present. Semen or vaginal secretions of an HIV-infected person can come into contact with open sores or ulcers on or near the genitals of the partner

and it is easier for the virus to pass into the other person's body. Although commercial sex workers run a higher risk of contracting the infection by the very nature of their profession, any person engaging in high risk behaviour like having sex with more than one partner is also at high risk of getting the infection.

IT MAY THEREFORE BE SUMMED UP THAT ANY PERSON ENGAGING IN PENETRATIVE UNPROTECTED SEX (HOMO OR HETERO) WITH MULTIPLE PARTNERS IS AT THE HIGHEST RISK.



## 2. BLOOD TRANSFUSION

Although the efficiency of transmission by a single transfusion is 90%, it accounts for only about 10 % of all HIV infected persons. This is by receiving blood from a person infected with HIV. This could also occur by receiving organs or tissue that are HIV-infected. As such, testing of blood for HIV before transfusion is mandatory. Every unit of blood has to be tested before transfusion and the government are striving hard to provide the facilities. Since we cannot predict the level of high risk behaviour in professional donors, the only way to ensure adequate supply of safe blood is by promoting voluntary blood-donation on a large scale. Once people realize that blood donation is absolutely safe, more and more people will be coming forward to donate blood.

### INTRAVENOUS DRUG USE

Although the efficiency of transmission by a single exposure is 0.5 to 1.0 % this accounts for about 10 % of all infected cases. The highest incidence in India by this route is in Manipur. As IV drugs are very costly, it is the common practice among users to share a single unit among several. Also, they share the same syringe and needle. Before injecting the drug they make sure that the needle is correctly placed by withdrawing blood into the syringe. If one among them harbours the HIV, all the others who share the same syringe are at high risk.

### OTHER INVASIVE PROCEDURES

This includes a host of procedures, which though commonly practised entail some degree of risk of HIV transmission. Inadequately sterilised needles of injection can convey the virus from a previous user to the next. It is particularly true in the case of quacks who have no idea of proper sterilisation techniques. Unqualified dental surgeons extracting teeth without using proper sterilisation techniques is a common sight in several of our villages. Unsterile instruments used in traditional circumcision, scarification, tattooing, acupuncture and ear-piercing could very well transmit the virus. It is not safe to be shaved by a barber using an unsterile razor.

THUS ALL PROCEDURES LIKELY TO RESULT IN A MIXING OF BLOOD OF ANY TWO INDIVIDUALS MUST BE LABELLED RISKY.

## 3. MOTHER TO CHILD

Although 25 to 30 % of all babies born to an HIV positive mother will be infected, this route accounts for only 0.1% of all HIV infection. The virus might enter the baby's body through the placenta, or it may enter when the blood of the child and its mother get mixed at the time of child birth. In a small minority of cases virus in the breast milk may get in through an abrasion in the baby's mouth or throat.

A point to be emphasised is the fact that all the modes of transmission other than sexual, put together, forms only less than 20 % of all HIV infections. It must also be noted that HIV infection is not confined to any particular group, profession, religion, sex, or nationality but is determined by the indulgence in high risk behaviour: **UNSAFE SEX AND CONTACT WITH UNSAFE BLOOD.**



## HOW HIV DOES NOT SPREAD ?

### HOW INFECTIOUS IS HIV ?

HIV is not like other communicable diseases. It does not spread through ordinary casual contact. It is not airborne, water-borne, vector-borne nor is it spread by skin contact. It is transmitted only if a mixing of the blood or body fluid of an infected person takes place with that of a noninfected person. It is not spread by:

- shaking hands
- hugging/kissing
- sharing cups, plates or other eating utensils
- sharing toilet/bathroom facilities
- by coughing, sneezing or through the air we breathe
- sitting together in a class room, canteen, bus, train
- sharing work-instruments or machinery
- swimming/playing together
- by donating blood
- insect bites
- looking after a case of AIDS

HIV infection, therefore, is not a public health nuisance like, say, TB, Leprosy, Common Cold, Jaundice, or Ringworm. To get the infection one has to share infected blood or mix one's sexual fluids with that of an infected person through intimate contact.

### CAN MOSQUITOES SPREAD THE HIV ?

No. For several reasons. a) Mosquitoes do not inject blood: they only suck it. b) Unlike in malaria/ filariasis, where the organism has a life cycle inside the mosquito, HIV does not have any such cycle and so does not lodge in the salivary gland of the insect. c) Unlike a blood-contaminated needle the proboscis of the mosquito is kept perfectly clean always. d) the total quantity of blood ingested by a mosquito is so small that it won't contain the minimum infective dose of the virus. e) HIV predominantly affects young adults sparing the very young and the very old who should really have been more affected had mosquitoes been spreading the disease.

### CAN WE GET THE DISEASE FROM A VISIT TO A HOSPITAL ?

Most of the hospitals run by trained personnel and exercising reasonable precautions in sterilisation will not transmit the disease to the patients. However, those who visit quacks (unqualified persons) who have no idea of proper sterilisation methods can get the infection.

**CAN ONE GET IT FROM THE BARBER SHOP ?**

Theoretically yes, if we sustain a cut with a HIV infected blood-contaminated razor. Practically, NO. The Chances of your visiting a barber whose previous client was HIV positive, the chances of the patient getting cut with the razor, the chances of the barber not cleaning the razor satisfactorily so as to leave infected blood on it, the chances of the barber's next client (yourself) getting cut with the same razor, all these occurring together are so remote, practically non-existent.

**Dr.MARIADAS SEBASTIAN  
PHYSICIAN  
G.H.KOTHAMANGALAM**



## **PREVENTION & CONTROL OF AIDS**

As yet, there are no drugs available that can destroy the AIDS virus or restore the immune system once it is damaged. Nor do we have a vaccine that can protect the body from HIV. So, until a vaccine or cure is found, the only weapon we have against AIDS, at present, is **KNOWLEDGE**. AIDS is not curable but it is totally preventable. Armed with the facts, anyone can protect oneself from AIDS. It is what we do, and not who we are, that puts us at risk. The virus is spread almost entirely through activities which we choose to pursue or avoid. In the absence of a cure or a vaccine, education about AIDS is the only solution to make individuals choose safe life-styles.

All the preventive and control measures against AIDS can be broadly divided into two levels: **PREVENTION AT THE INDIVIDUAL LEVEL & PREVENTION AT THE COMMUNITY LEVEL.**

### **A) AT THE INDIVIDUAL LEVEL**

As we have already learnt the modes of spread of virus, an individual should find it an easy task to avoid HIV infection. It can be prevented through relatively easy measures and precautions.

#### **1) PREVENTION OF SEXUAL TRANSMISSION**

The majority of HIV infections throughout the world, has been acquired through sexual intercourse, mostly heterosexual. The sexual transmission of HIV is dependent upon the type and frequency of sexual behaviour by individuals.

#### **SAFER SEX PRACTICES**

HIV is transmitted only through physical inoculation of blood or genital and other body secretions. The virus is transmitted by the penetrative sexual act in which HIV infected semen, vaginal or cervical secretions or blood is exchanged. Hence a change in behaviour from high risk to responsible sexual behaviour has become necessary. This is the essence of safer sex. Safer sex does not simply mean using a condom and reducing the number of sexual partners. It also means being able to express sexuality in ways that prevent transmission of HIV and other infections. It takes into account the complexity of human nature, while enabling individuals to have more control over their own sexual relationships.

#### **MONOGAMY & SAFE-SEX.**

In the context of heterosexual transmission **ABSTINENCE** (having no sex at all) is 100% safe. But it is not a realistic alternative. Having sex with only one (uninfected) partner- **MONOGAMY**- is usually very safe, provided it is lifelong. An agreement to be mutually faithful implies trust. Having only a single sexual partner (or completely avoiding premarital/ extramarital sexual relations) is the safest first step in eliminating unsafe sex practices). If one has more than a single sexual

partner, then the least one can do is to have safer sex through the proper use of condoms.

Ignorance about the partner's lifestyle or ignorance about AIDS can put one at high risk of getting the infection. Suppose person B is sexually faithful to person A. And suppose that person A also has sexual contact with three other persons and each of these three have sexual contacts with three others, then person B can get infected through person A, if any one among the 13 harbours HIV. And note that person B has always been faithful. This emphasises the point that the lifestyle of one's partner can put one at high risk.

Some sexual practices carry greater risk of spreading HIV than others. Penetrative sex without a condom which may cause local trauma or bleeding due to abrasions is more likely to transmit HIV sexually. It is essential that the barrier method, in the form of condoms be used. Although condoms provide good protection, they can never be 100% safe, because they can sometimes tear, break or slip off during sexual intercourse. But the risks are much less if used properly, every single time, before the first genital contact.

## **STD & HIV**

STDs are those diseases which are transferred during sexual intercourse. Some of the common ones are syphilis, gonorrhoea, herpes, clamidia etc. Some of the common symptoms are burning pain on urination, a discharge, sore, lump, ulcer or blisters on or near the sex organs. Persons with STDs are at a much higher risk of getting HIV infection because STD itself is the proof that they indulge in high risk sexual behaviour. Moreover, a person with a discharge has a five times greater efficiency of transmission of HIV with a single exposure while the risk is multiplied twenty times if there is an ulcer.

It is therefore essential that proper treatment for the STD from a qualified doctor is taken to effect a cure. It would also be very wise of the patient to bear in mind that he was very very lucky to have been let off with a treatable illness whereas he could very well have contracted the dreaded AIDS at just the very same risk.

## **BLOOD SAFETY AND AIDS**

A lot has to be done to ensure that HIV is not transmitted through blood transfusions in the country. At the individual level it would be wise to remember that blood transfusion is risky and is to be avoided, if possible. But when it is really necessary, blood really saves a lot of lives. But then, one should insist on screened HIV-free blood. The Supreme Court has already given directives to ensure that only HIV-free blood is to be transfused in the country. Even when blood is absolutely necessary, one should avoid blood from professional donors who may be living a high risk life. Choose blood from known voluntary donors with risk-free.

The fact that blood donation is very safe needs to be emphasised and widely publicized so that more and more voluntary donors come forward to meet the high demand. Then only can we ease out the more risky professional donor.



## PREVENTION OF TRANSMISSION THROUGH IV DRUG USE.

This is possible through ensuring the use of sterilised/disposable needles. Behaviour associated with IV Drug use is difficult to change. The sharing of needles and other equipment is motivated partly by the addiction itself, (i.e, the urge to immediately satisfy one's needs) and partly by the shortage of clean equipment. It is possible to spread the message 'CLEAN NEEDLE USE' among the drug users without in any way sanctioning the use of the drug itself. Prostitution is a common source of income to several drug-users.

## PREVENTION OF TRANSMISSION THROUGH OTHER INVASIVE PROCEDURES.

The risk of HIV infection in the work place is limited to medical and paramedical personnel, and lab technicians likely to handle infected materials. Strict compliance with instructions about universal precautions and barrier methods of patient care can almost eliminate this mode of spread. The proper use of rubber gloves, masks, gowns and eye-wear and proper sterilisation of syringes and needles and the proper decontamination of all the instruments to be re-used can virtually eliminate hospital transmission of HIV.

One should never permit any invasive procedure to be carried out on one's body by quacks, or unqualified persons who do not follow proper sterilisation techniques. In common social practices where a mixing of blood is likely such as circumcision, ear-piercing, tattooing, etc. adoption of elementary precautions such as sterilization of needle and other instruments will go a long way in preventing the spread of HIV.

## PREVENTION OF TRANSMISSION FROM MOTHER TO CHILD

Women who are infected will need special counselling and medical attention. Termination of pregnancy as an option should be discussed sensitively and the decision left to the mother. Women who are infected and considering pregnancy should be counselled and given all the necessary facts so that they can take a decision on whether to have a baby or not. Women who are at a high risk of HIV infection have to be motivated to change to a risk-free lifestyle if they want to conceive.

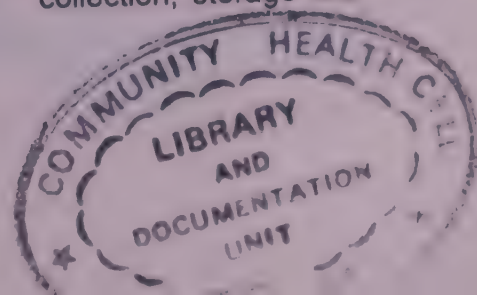
## B) AT THE COMMUNITY LEVEL

The public health authorities have a significant role to play in combating the disease, particularly by:-

- 1) Building up adequate blood banking services at the state and district level including provision of trained/qualified manpower.
- 2) Enforcing quality control of blood in all its facets, collection, storage and distribution.

WH-150

06961



- 3) Ensuring that people receive scientific information on HIV/AIDS through all channels of communication in the languages they speak.
- 4) Popularising the use and ensuring adequate supply of good quality condoms.
- 5) Providing free, confidential HIV testing and counselling services.
- 6) Ensuring that persons with HIV/AIDS are not discriminated against.
- 7) Educating the community on safe sex practices.
- 8) Strengthening the STD clinics and improving STD control.

Armed with scientific information, an all-out effort should be made to disseminate this information far and wide. Collective action at the community level should help modify the present high risk behaviour of the community to a risk-free lifestyle. As long as we do not have any cure or vaccine for AIDS, EDUCATION of every individual at risk is the only recourse against this killer-disease. WE JUST HAVE TO REACH OUT INFORMATION TO THE PEOPLE BEFORE THE VIRUS OVERTAKES US TO ENGULF THEM.

## PREVENTION OF HIV INFECTION

In the previous section the routes through which a person can get infected were listed and explained. It was described that there are only three routes through which HIV can enter a person.

1. From an infected pregnant mother to baby
2. Through infected blood gaining entry into an uninfected body.
3. Through sexual intercourse.

If you take 100 people who are infected with HIV and look at the routes through which they became infected the following pattern will emerge.

Mother to baby	()	approximately
Through blood	()	less than 20%
Sexual route	()	more than 80%

## HOW TO PREVENT INFECTION

Everyone would like to prevent an infection with HIV. It is easy to achieve protection against HIV. All that one has to do is to THINK AND ACT RATIONALLY. People get infected because they fail to think and act rationally. Let us see how we can do both.

1. Decide through which route/s you run the risk of getting infected with HIV. Let us examine the possibilities.



**a. Mother to baby route.** This can happen only during pregnancy, delivery and rarely in the period immediately after delivery. If a baby gets infected in this way it does not live beyond five years of age. In other words, anyone older than five years could never have got infected through this route. It also means that as far as you are concerned, this route is non-existent.

**b. Blood route**

We already saw that, if the blood of an HIV infected person enters the body of an uninfected person, the latter can get infected. Think about the situations in which blood from one person is likely to enter another person. You will find that such situations happen only during treatment in hospitals. Doctors and nurses are being trained to take proper precautions to avoid this happening. Thus doctors and nurses are working to prevent HIV entering your body through the blood route. This also means that you as an individual do not have to do anything in particular to avoid getting infected through the blood route.

**c. Sex route**

As was mentioned before, about 90% of people get infected through this route. People have sex in privacy and others can do little to protect people having sex. So the only way is that people having sex should know how to protect themselves and act accordingly. To do this, first we have to find out what is the greatest source of danger that would lead a person to infection with HIV.

People sometimes think that the greatest sources of danger are prostitutes or foreigners. Think again. No one can normally have sex with you unless you also agree. Thus the greatest source of danger lurks within yourself. If you realise this, you can plan how to protect yourself.

For this, you should realise that HIV infection is seen not only in prostitutes but also among the general public, rich and poor, young and old, educated and uneducated, men and women. Since people infected with HIV do not show symptoms upto 5 years or longer, you cannot detect whether one is infected or not by looking at a person. A doctor also cannot declare that a person is not infected even after detailed examination. Hence, when you think rationally, it is safer to assume that a person could be infected even if it is a person whom you know very well and looks healthy. Thus we find that though sex is necessary for humans, it carries considerable risk now unless you think and act rationally.

**Methods to avoid getting infected through the sex route**

If you learn and practise these methods you can lead a happy life free from the fear of getting HIV and consequently AIDS. To learn this you have to understand sex.

Sex gives pleasure. It is to be noted that people are usually much interested in sex. This applies not only to the youth but to adults also. Because it gives pleasure, people may indulge in sex, unmindful of the consequences. Young people also may get opportunities to have sex. It may be with someone whom they know or with commercial sex workers. In both these situations there is a risk of getting infected with HIV. Though the desire to have sex may be strong, one should realise that it may

mean death from AIDS. IF ALL YOUNG PEOPLE THINK AND ACT IN THIS MANNER AND HAVE SEX ONLY AFTER MARRIAGE WITH THEIR LIFE PARTNERS, THE FUTURE GENERATION WILL BE AIDS-FREE. In this way you would not only remain free from AIDS, but will also have tremendous emotional satisfaction. However, you might get into difficult situations occasionally.

a. Though you do not want to have sex, another person may tempt/force you to have sex. If you do not want sex, you have the full authority to say 'NO' to sex, whosoever the other person might be.

b. You might feel sexual attraction to another person and think of having sex. In such situations, you should remember the great danger of AIDS. Only you and you alone can decide whether you should put yourself at the risk of getting AIDS. If only you can think and act rationally you can avert the avoidable tragedy of acquiring AIDS. You can also feel legitimately proud about it because of your rational decisions that you are healthy and HIV-free.

It is also important to know that HIV can be transmitted not only through sex between male and female but also through sex between the same sex.

**Dr.K.V.SREENIVASAN  
SOMA  
THIRUVANANTHAPURAM**



## HANDLING QUESTIONS

Questions (generally) fall into three categories:

1. serious questions where the person is seeking information
2. questions about recent newspaper reports
3. personal questions (usually rare)

When handling questions, remember :

1. to have the courage to say "I do not know, but I can find out and tell you."
2. that a sense of humour helps
3. that the objective of this programme is to share facts and not personal information.
4. that there is no way by which one person can know everything - especially about HIV/AIDS which still has so many unanswered questions

and that

5. there may not be clear answers to some questions - especially those that deal with attitudes or feelings. Such a question can be useful in starting a discussion in the group and helping the participants to see that attitudes differ from person to person, but we can learn to accept and respect these differences.

The questions have been grouped under three sections - HIV/AIDS, sex and sexuality and learning to say NO

### HIV/AIDS

1. How did HIV originate ?

There are several theories about the origin of HIV but there is no general agreement on them. It is possible that HIV has been with us for a long time, and evolved into its present virulent form only recently.

What is important to know is that human behaviour is encouraging the spread of this virus, and keeping it alive.

2. What are HIV 1 and HIV 2 ?

HIV 1 and HIV 2 are two forms of HIV that differ in their genetic make-up. HIV 1 was discovered in 1983 and HIV 2 in 1986. Both forms have been detected in India.

3. Is there any HIV 3 ?

No, there is no HIV 3. It was wrongly identified and its existence has been disproved.

4. Do animals get AIDS ?

No - the HIV is the human immunodeficiency virus. Some animals do develop immune deficiencies through viruses, but these do not infect human beings.

5. Do mosquitoes transmit HIV ?

No. If mosquitoes did transmit HIV, then people of all age groups should be uniformly affected. However HIV infection is highest in the sexually active age group of 15-40 years. Also, the HIV does not survive inside the body of the mosquito.

6. Can sharing razors spread HIV infection ?

There is a low risk of transmission, if razors are not cleaned properly after use to remove potentially infected blood. Even though the risk is low, transmission can be easily prevented by not sharing razors and by educating barbers to sterilize their equipment.

7. Can I get HIV infection by donating blood?

No - all materials used for collecting blood are sterile and infection cannot occur through blood donation.

8. Can artificial insemination spread HIV ?

Yes - if semen used for insemination is from an HIV infected person. All semen donors must be tested for HIV before semen is collected.

9. Is dried HIV positive blood a source of infection ?

No - the virus cannot survive in dried blood.

10. Who is more at risk for getting infected - a man or a woman ?

Women are more at risk because -

- i. semen contains larger quantities of this virus than vaginal fluids
- ii. semen stays in contact with the woman's sex organs for a long period
- iii. inflammation in the genital tract can go unnoticed in women- but these areas facilitate entry of the virus
- iv. insisting on safer sex practices may be difficult - if not impossible - for a woman.



11. Can an HIV positive person stay healthy and never develop AIDS ?

There are some people who have been HIV positive since the early 1980s who are still healthy. It is generally accepted that an HIV positive person will develop AIDS. But since HIV infection has been around only since 1981, it is probably too early to say if some people will be only carriers and never develop AIDS.

12. Can an HIV positive person do anything to stay healthy ?

An HIV positive person can stay healthy longer by eating sensibly, taking adequate exercise, continuing to work, avoiding drug /alcohol use , adopting safer sex practice, having an optimistic attitude and the emotional support of family and friends.

13. Is there any system of medicine that offers treatment for HIV/AIDS ?

Until today there is no scientific proof that treatment is available in any system of medicine.

14. If an HIV positive person's blood can be completely replaced with uninfected blood can he be cured ?

This is not possible, since the virus is present not only in the blood, but in the brain, the lymph nodes, and in the organs of the digestive system and the reproductive system. The virus can, therefore, never be completely eliminated from the body.

15. Can two HIV positive people get married ?

Yes - if they want to. However they must practise safer sex to prevent reinfection with HIV. They will also need to think carefully before having a child, as any child born to them is likely to be infected.

16. Why can HIV testing not be made compulsory for everyone ?

Compulsory testing serves no purpose because -

- i. it will never be possible to test every single individual
- ii. a person can test negative if the test is done during the window period
- iii. testing should never be done without the consent of the individual
- iv. HIV positive people are discriminated against and stigmatised by society - so people who are at risk will avoid testing.

17. Since blood can test negative during the window period don't all blood transfusions carry a risk ?

Yes - there is a risk because of the limitation of the screening test. This risk can be minimised by -

- i. transfusing blood only if absolutely essential
- ii. autotransfusion - where a person donates blood for himself  
(possible only when an operation is planned well in advance)
- iii. interviewing all donors so that blood is not taken from someone who is practising high-risk behaviour.

18. What is the difference between HIV infection and STD (sexually transmitted diseases) ?

Like STDs HIV infection is transmitted mainly through sexual intercourse (80 - 90% of infections in India are through this route). Unlike other STDs HIV infection has no cure, has a high mortality and has no obvious sign of infection.

19. What is a condom ?

A condom is a latex sheath that is worn over the penis just before the act of sexual intercourse. Condoms prevent pregnancy and also protect against HIV infection and STDs.

20. How does a condom protect a person from HIV infection ?

A condom acts as a physical barrier and prevents potentially infected semen or vaginal secretions from direct contact with the partner's sex organs/anus/mouth.

21. Who should use condoms ?

Anyone who has sexual contact with more than one faithful, uninfected partner must use condoms.

22. Are there condoms for women ?

Yes - there is a condom called femidom. It is very expensive and is not yet available in India.

23. Do contraceptives like the pill, the IUD and 'Today' protect a woman from HIV infection ?

No.



## SEX AND SEXUALITY

### 1. Who is a heterosexual ?

A heterosexual is a person who is sexually attracted to and has sexual relationships with a person of the opposite sex.

### 2. Who is a homosexual ?

A homosexual is a person who is sexually attracted to and has sexual relationships with a person of the same sex. 'Gay' is the common term for male homosexuals while 'lesbian' is used for female homosexuals.

### 3. What is masturbation ?

Masturbation is a form of sexual gratification by stimulating one's own genitals.

### 4. Is masturbation harmful ?

No. Masturbation is a normal phenomenon.

## STANDING UP FOR ONESELF

### 1. How do I say "no" to my friends if I do not want to take part in a particular activity ?

Standing up for yourself is not always easy. But remember you have the right to say "no" and the right to have and express your own feelings. When you want to say "no" say so clearly without giving hints and saying things in a vague manner. Do not feel guilty, and do not feel that you have to give a reason for saying "no".

### 2. Won't my friends think I am being quarrelsome if I assert myself ?

Being assertive does not mean being aggressive. Being assertive means quietly and calmly stating your feelings. It is not talking in a hurtful or domineering manner. Being assertive means taking responsibility for your feelings and actions. Try saying, "I feel ....." or "I do not want ....." rather than, "you make me feel....." or "you are doing .....".

### 3. Won't I lose my friends if I assert myself ?

It is possible that some of your friends will keep away from you if you assert yourself. In such a situation you have to ask yourself which is more important to you - standing up for what you are convinced is right and may be losing some of your friends or doing what your friends want you to do although it makes you unhappy. (It

is also possible that your friends will respect you more for standing up for your rights - and that your behaviour will get you new friends).

4. What do I do if a person makes unwanted sexual advances towards me ?

The first thing to do is to tell the person very clearly and firmly that you do not like his/her behaviour. Walk away, if you can, and avoid situations where you may be alone with this person, in the future. If possible, talk to an adult whom you trust about what has happened.

Most important - do not feel guilty. You are not responsible for the other person's behaviour.

**JANAKI SANKARAN  
BHAVANS VIDYA MANDIR  
ERNAKULAM**





